
# CDF Operations Report

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All Experimenters' Meeting

# Stores summary

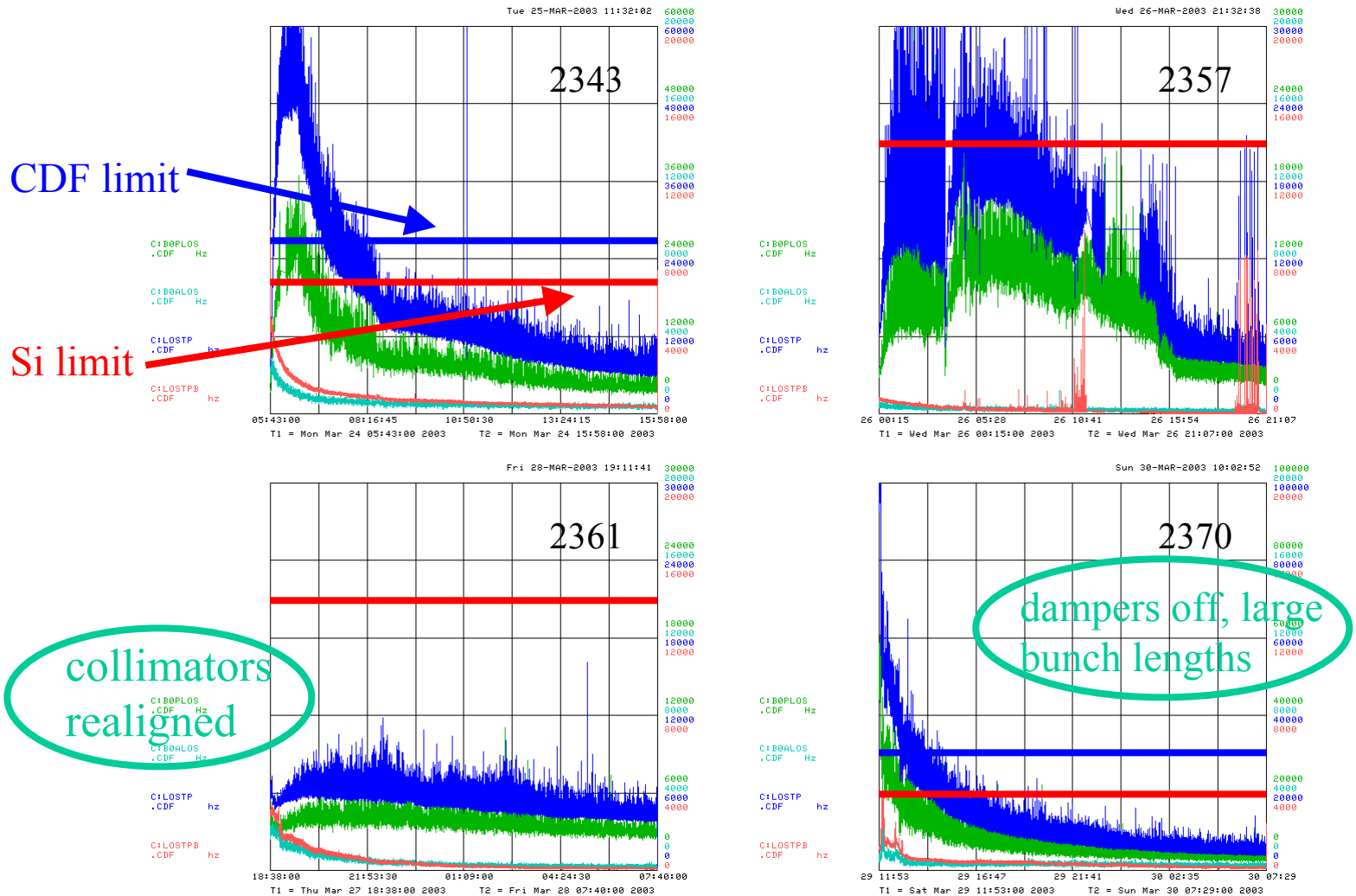
| Date | Store | Duration (h) | Inst Lum (initial) | Int Lum (delivered) | Int Lum (live) | ε |
|---|---|---|---|---|---|---|
| Mo 3/24 | 2343 | 10.3 | 32.5e30 | 804.8 | 598.8 | 74.4% |
| We 3/26 | 2357 | 20.9 | 28.9e30 | 1180.6 | 989.5 | 83.8% |
| Th 3/27 | 2361 | 13.0 | 18.1e30 | 538.9 | 503.8 | 93.5% |
| Sa 3/29 | 2370 | 19.6 | 30.1e30 | 1212.0 | 702.8 | 58.0% |
| Su 3/30 | 2372 | 0.75 | 0.5e30 | 1.1 | 0.7 | 68.2% |
| Total | | 64.6 | | 3.7 $pb^{-1}$ | 2.8 $pb^{-1}$ | 75% |

2.2 $pb^{-1}$ physics data with silicon

# Overview of stores

- Store 2343
  - Once losses were under control, ran smoothly
  - Several HV trips due to loss spikes
- Store 2357
  - Lots of HV trips due to loss spikes
  - Silicon in and out all store
    - High losses, ACNET monitoring unreliable, in-store studies
- Store 2361
  - Low losses, smooth running
  - A few test runs to study TOF triggers
- Store 2370
  - Recovering from power cut --- more later

# Losses at CDF



# Power cut at B0

- UPS shut off by mistake Friday morning
  - Lost power to the entire controls systems for B0's experimental infrastructure
  - Systems "failed safe" and fired every alarm we have; all experiment power cut
- Recovery
  - Controls system analog input hardware was difficult to revive
  - Back to life by afternoon, begin detector check-out
- Casualties
  - Solenoid LHe supply evaporated away, took a day to replenish
  - Blown ammeter in silicon PS, fixed on access
  - One HV problem in forward muon detector
    - Appeared after several hours of stable operation, will address on next access
  - Muon TDC problems
    - Not caught until store 2370, lost several hours diagnosing
    - Fixed

# Conclusions

- When losses are low, CDF runs very efficiently (cf. Thursday's store and today's store)
  - Few HV trips
  - Quick integration of silicon
- Nothing irretrievably lost from Friday power cut
  - Will investigate/fix muon HV problem on next access
- Battery of trigger tests foreseen for this week to improve physics efficiency at higher L1 accept rates